CLAIMS

1.   A game control device that conforms to Universal Serial Bus (USB) device class definitions for Human Interface Devices (HIDs), comprising:

    a plurality of human-actuated controls;

    one or more HID descriptors that describe aspects of the human-actuated controls, the HID descriptors associating HID string indexes with the respective human-actuated controls;

    control mappings corresponding to a plurality of application program genres, the control mappings indicating actions to be performed in application programs of particular genres in response to respective ones of the human-actuated controls, wherein the control mappings identify controls by their HID string indexes.

2.   A game control device as recited in claim 1, the control mappings being indicated in data sets comprising:

    a control section indicating the HID string indexes for the respective controls;

    a genre section indicating actions to be performed in application programs of particular genres in response to respective ones of the human-actuated controls.

3.   A computer peripheral comprising:

    a plurality of human-actuated controls;

    non-volatile memory containing control mappings corresponding to a plurality of application program genres, the control mappings indicating actions to

be performed in application programs of particular genres in response to respective ones of the human-actuated controls.

4.   A computer peripheral as recited in claim 3, wherein the computer peripheral is a USB device and contains device class descriptions of the human-actuated controls in a format specified by the USB device class definition for human interface devices (HIDs), the control mappings containing references to HID identifiers for the respective human-actuated controls.

5.   A computer peripheral as recited in claim 3, wherein the computer peripheral is a USB device and contains descriptions of the human-actuated controls in a USB-specified format, the control mappings containing references to control identifiers contained in said descriptions.

6.   A computer peripheral as recited in claim 3, wherein the computer peripheral is a USB device and contains device class descriptions of the human-actuated controls in a format specified by the USB device class definition for human interface devices (HIDs), said device class definitions defining different HID string indexes for the respective human-actuated controls, the control mappings identifying controls by their different HID string indexes.

7.   A computer peripheral as recited in claim 3, the non-volatile memory containing a descriptor comprising:

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres.

8. A computer peripheral as recited in claim 3, the non-volatile memory containing a descriptor comprising:

a control section indicating string indexes for the respective controls, the string indexes corresponding to separately defined human device interface (HID) string indexes;

a genre section indicating the control mappings for the respective application program genres, the control mappings identifying controls by their HID string indexes.

9. A computer peripheral as recited in claim 3, the non-volatile memory containing a descriptor comprising:

a header section indicating the number of controls on the computer peripheral and the number of genres for which control mappings exist in the non-volatile memory;

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres;

a diagram section containing one more graphics images of the computer peripheral, the one or more graphics images identifying locations of the human-actuated controls on the computer peripheral.

10. A computer peripheral as recited in claim 3, the non-volatile memory also containing control data that indicates:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the computer peripheral;

coordinates of the graphics overlays.

11. A computer peripheral as recited in claim 3, the non-volatile memory also containing control data that indicates:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the computer peripheral;

coordinates of the graphics overlays;

coordinates for pointers to the human-actuated controls.

12. A computer peripheral as recited in claim 3, the non-volatile memory containing a descriptor comprising:

a header section indicating the number of controls on the computer peripheral and the number of genres for which control mappings exist in the non-volatile memory;

a control section indicating string indexes for the respective controls, the control section also indicating graphics overlays that identify the human-actuated controls on the computer peripheral;

a genre section indicating the control mappings for the respective application program genres.

13. A computer peripheral as recited in claim 3, the non-volatile memory further containing one more graphics images that identify the locations of the human-actuated controls on the computer peripheral.

14. A method comprising:

defining a plurality of application program genres;

running an application program that has been classified as a particular application program genre, wherein the application program is responsive to a plurality of human-actuated controls on a control device;

querying the control device to obtain a genre descriptor, the genre descriptor indicating actions to be performed by an application program of said particular application program genre in response to respective ones of the human-actuated controls.

15. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres.

16. A method as recited in claim 14, further comprising:

retrieving one or more HID descriptors from the control device, the HID descriptors describing aspects of the human-actuated controls, the HID descriptors associating HID string indexes with the respective human-actuated controls;

wherein the obtained genre descriptor identifies the human-actuated controls by their HID string indexes.

17. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

a control section indicating string indexes for the respective controls, the string indexes corresponding to separately defined human device interface (HID) string indexes;

a genre section indicating the control mappings for the respective application program genres, the control mappings identifying controls by their HID string indexes.

18. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

a header section indicating the number of controls on the control device and the number of genres for which control mappings exist in the genre descriptor;

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres;

a diagram section containing one more graphics images of the control device, the one or more graphics images identifying locations of the human-actuated controls on the control device.

19. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the control device;

coordinates of the graphics overlays.

20. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the control device;

coordinates of the graphics overlays;

coordinates for pointers to the human-actuated controls.

21. A method as recited in claim 14, wherein the obtained genre descriptor comprises:

a header section indicating the number of controls on the control device and the number of genres for which control mappings exist in the non-volatile memory;

a control section indicating string indexes for the respective controls, the control section also indicating graphics overlays that identify the human-actuated controls on the control device;

a genre section indicating the control mappings for the respective application program genres.

22. A method as recited in claim 14, wherein the obtained genre descriptor comprises one more graphics images that identify the locations of the human-actuated controls on the control device.

23. A computer-readable storage medium containing system services utilized by an application program to interact with a control device having a plurality of human-actuated controls, wherein the system services perform acts comprising:

receiving a request from an application program for a genre description corresponding to one of a plurality of application program genres;

querying the control device to obtain a genre descriptor, the genre descriptor indicating actions to be performed by an application program of said one of a plurality of application program genres in response to respective ones of the human-actuated controls;

returning the obtained genre descriptor to the requesting application program.

24. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres.

25. A computer-readable storage medium as recited in claim 23, the systems services performs a further act comprising:

retrieving one or more HID descriptors from the control device, the HID descriptors describing aspects of the human-actuated controls, the HID descriptors associating HID string indexes with the respective human-actuated controls;

wherein the obtained genre descriptor identifies the human-actuated controls by their HID string indexes.

26. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

a control section indicating string indexes for the respective controls, the string indexes corresponding to separately defined human device interface (HID) string indexes;

a genre section indicating the control mappings for the respective application program genres, the control mappings identifying controls by their HID string indexes.

27. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

a header section indicating the number of controls on the control device and the number of genres for which control mappings exist in the genre descriptor;

a control section indicating string indexes for the respective controls;

a genre section indicating the control mappings for the respective application program genres;

a diagram section containing one more graphics images of the control device, the one or more graphics images identifying locations of the human-actuated controls on the control device.

28. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the control device;

coordinates of the graphics overlays.

29. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

string indexes for the respective controls;

graphics overlays that identify the human-actuated controls on the control device;

coordinates of the graphics overlays;

coordinates for pointers to the human-actuated controls.

30. A computer-readable storage medium as recited in claim 23, wherein the obtained genre descriptor comprises:

a header section indicating the number of controls on the control device and the number of genres for which control mappings exist in the non-volatile memory;

a control section indicating string indexes for the respective controls, the control section also indicating graphics overlays that identify the human-actuated controls on the control device;

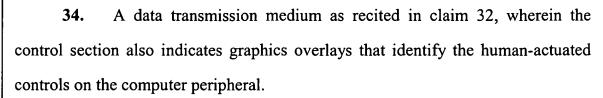a genre section indicating the control mappings for the respective application program genres/.

31. A computer-readable storage medium as recited in claim, 23 wherein the obtained genre descriptor comprises one more graphics images that identify the locations of the human-actuated controls on the control device.

32. A data transmission medium carrying a data structure comprising:

a header section indicating the number of human-actuated controls on a computer peripheral and the number of application program genres for which control mappings exist in the data structure;

a control section indicating HID string indexes for the respective controls on the computer peripheral;

a genre section indicating control mappings for the respective application program genres.

33. A data transmission medium as recited in claim 32, further comprising:

a diagram section containing one more graphics images of the computer peripheral, the one or more graphics images identifying locations of the human-actuated controls on the computer peripheral.

34. A data transmission medium as recited in claim 32, wherein the control section also indicates graphics overlays that identify the human-actuated controls on the computer peripheral.

35. A data transmission medium as recited in claim 32, further comprising a diagram section, the diagram section comprising graphics overlays that identify the human-actuated controls on the computer peripheral;

wherein the control section indicates coordinates of the graphics overlays and coordinates for pointers to the human-actuated controls.